STATE OF MAINE DEPARTMENT OF ENVIRONMENTAL PROTECTION



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COMMISSIONER

Moose River Lumber Company, Inc.)	Department
Somerset County)	Findings of Fact and Order
Moose River, Maine)	Air Emission License
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After review of the NSR Air Emission License modification application, staff investigation reports and other documents in the applicant's file in the Bureau of Air Quality, pursuant to 38 M.R.S.A, Section 344 and Section 590, the Department finds the following facts:

I. Registration

A. Introduction

FACILITY	Moose River Lumber Company, Inc. (Moose River)
LICENSE TYPE	New Source Review (NSR) Air Emission License
NATURE OF BUSINESS	Lumber and Wood Products Manufacturer
FACILITY LOCATION	25 Talpey Rd., Moose River, ME 04945

B. Amendment Description

Moose River is a spruce and fir board lumber mill located in Moose River, Maine. Moose River is a major source of volatile organic compound (VOC) emissions and operates under Part 70 Air Emission License A-779-70-A-I as well as NSR Air Emission License A-779-71-A-N and its subsequent amendments. Moose River's current licenses include the operation of two wood fired boilers, designated Boiler #1 (15.3 MMBtu/hr) and Boiler #2 (4.5 MMBtu/hr), and a #2 fuel oil burning boiler, designated Boiler #3 (25.1 MMBtu/hr).

Moose River has applied to include the installation and operation of a new 29.39 MMBtu/hr wood fired boiler to the facility's licensed emission equipment This NSR air emission license will incorporate all applicable requirements for the facility's licensed emissions equipment as established in the facility's current Part 70 Air Emission License (A-779-70-A-I) and the facility's NSR Air Emission License (A-779-71-A-N) and its amendments. This NSR Air Emission License will supersede Air Emission License A-779-71-A-N and its amendments.

Moose River believes that the new boiler will essentially replace the three currently licensed boilers (Boilers #1, #2 and #3). Moose River plans to retain Boilers #1 and #2 for operation during maintenance periods for Boiler #4 and during periods of extreme cold weather. Boiler #3 will be retained as a back-up.

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C. Emission Equipment

1. The following fuel burning emission units are addressed by this NSR Air Emission License:

Emissions Unit ID	Unit Capacity	Unit Type	Stack #
Boiler #1	15.3 MMBtu/hr	Fuel Burning, Wood	#1
Boiler #2	4.5 MMBtu/hr	Fuel Burning, Wood	#2
Boiler #3	25.1 MMBtu/hr	Fuel Burning, @2 Oil	#3
Boiler #4	29.39 MMBtu/hr	Fuel Burning, Wood	#4

2. The following process emission units are addressed by this NSR Air Emission License:

Emissions Unit ID	Process Rate	Unit type
Kiln #1	34 Million Boardfeet per Year	Wood Drying
Kiln #2	32 Million Boardfeet per Year	Wood Drying
Kiln #3	32 Million Boardfeet per Year	Wood Drying
Parts Washer	30 gallon	Degreaser

- Process rates listed within the Findings of Fact section of this license are referenced for the
 purposes of description only. Process rates that are determined to be licensed limitations are
 stated in the Order section of this license.
- Moose River has additional insignificant activities, which do not need to be listed in the emission equipment table above. The list of insignificant activities can be found in the Part 70 license application and in Appendix B of Chapter 140 of the Department's Regulations.

D. Application Classification

The application for Moose River does not violate any applicable federal or state requirements and does not reduce monitoring, reporting, testing or record keeping. This application does seek to modify a Best Available Control Technology (BACT) analysis performed per New Source Review.

Moose River has applied to include the installation and operation of a new 29.39 MMBtu/hr wood fired boiler to the facility's licensed emission equipment inventory. The modification of a major source is considered a major modification based on whether or not expected emissions increases exceed the "Significant Emission Increase Levels" as given in *Definitions Regulation*, 06-096 CMR 100 (last amended December 1, 2005). As a result of the operation of the new boiler, an increase in potential emissions for all criteria pollutants except sulfur dioxide (SO₂) will be expected. The emission increase is determined by subtracting the average actual emissions of the 24 months preceding the modification (or representative 24 months) from the maximum future license allowed emissions.

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The emissions increase as a result of the new wood fired boiler is as follows:

Pollutant	Average Past Actuals	Future Permit	Net Change	Significance
	(04-05)	(tons/year)	(tons/year)	Level
	(tons/year)			(tons/year)
PM	14.29	73.43	59.14	25
PM ₁₀	14.29	73.43	59.14	15
SO_2	8.86	44.41	35.55	40
NO _x	22.86	96.65	73.79	40
CO	24.15	133.20	109.05	100
VOC	50.51	68.62	18.11	40

This amendment is determined to be a major modification under *Major and Minor Source Air Emission License Regulations*, 06-096 CMR 115 (last amended December 1, 2005) and has been processed as such.

II. BEST PRACTICAL TREATMENT (BPT)

A. Introduction

In order to receive a license the applicant must control emissions from each unit to a level considered by the Department to represent Best Practical Treatment (BPT), as defined in 06-096 CMR 100 of the Department regulations. Separate control requirement categories exist for new and existing equipment as well as for those sources located in designated non-attainment areas.

BPT for existing emissions equipment means that method which controls or reduces emissions to the lowest possible level considering:

- the existing state of technology;
- the effectiveness of available alternatives for reducing emission from the source being considered; and
- the economic feasibility for the type of establishment involved.

BPT for new sources and modifications requires a demonstration that emissions are receiving Best Available Control Technology (BACT), as defined in Chapter 100 of the Air Regulations. BACT is a top-down approach to selecting air emission controls considering economic, environmental and energy impacts

B. Fuel Burning Emission Equipment Descriptions

Moose River's Air Emission License A-779-71-A-N and its amendments permit the facility to operate two wood fired boilers, designated Boiler #1 (15.3 MMBtu/hr) and Boiler #2 (4.5 MMBtu/hr), and a #2 fuel oil burning boiler, designated Boiler #3 (25.1 MMBtu/hr).

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Moose River has applied to include the installation and operation of a new 29.39 MMBtu/hr wood fired boiler, designated Boiler #4, to the facility's licensed emission equipment inventory.

1. Boiler #1

Boiler #1 is referred to as the kiln boiler and has a heat input capacity of 15.3 MMBtu/hr. Boiler #1 fires only kiln-dried planer mill shavings. Boiler #1 was manufactured in 1988, prior to the NSPS applicability date of June 9,1989 and is therefore not subject to EPA New Source Performance Standards (NSPS) 40 CFR Part 60, Subpart Dc (Standards of Performance for Small Industrial, Commercial and Institutional Steam Generators). Boiler #1 exhausts through its own stack. The stack is 70 feet AGL (Above Ground Level) which is 73% Good Engineering Practice (GEP) height.

The following represents BPT for Boiler #1:

- a. PM emissions from Boiler #4 are subject to *Burning Equipment Particulate Emission Standard*, 06-096 CMR 103, (last amended November 3, 1990). However, the PM emission limit of 0.3 lb/MMBtu when firing wood shall be considered BPT. The PM emission factor is based on a manufacture guarantee. The PM₁₀ emission calculations are based on the PM factor.
- b. NO_X, SO₂, CO and VOC emission rates calculated from AP-42 emission data dated 7/01.
- c. Visible emissions from the stack are subject to *Visible Emissions Regulation*, 06-096 CMR 101 (last amended May 18, 2003). Visible emissions from Boilers #1 shall not exceed 30% opacity on a six-minute block average basis, except for no more than 2 six-minute averages in any three-hour period.

The calculations for the boiler's firing rate and emission limits were based on a heat content of 7000 Btu/lb for the kiln-dried shavings.

As discussed in the <u>Boiler #4</u> section of this "Finding-of-Fact", when Boilers #1 and #4 are operated in conjunction, Moose River must reduce the heat input firing capacity of Boiler #1 to 20% capacity or less, on a 24-hour basis, except during periods of start-up and shutdown when operational overlap is necessary.

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2. Boiler #2

Boiler #2 is a home made boiler with a heat input capacity estimated at 4.5 MMBtu/hr. Boiler #2 consists of an on-site constructed dutch oven style section in which hog fuel (wood waste and bark) from facility operations is fired. Exhaust gases from the combustion section of the boiler pass through a fire tube steam generation section and exhaust through the boiler's own 90-foot stack, which is greater than the GEP height of 75.8 feet. Boiler #2 is used for facility heating needs. The Heat input capacity of Boiler #2 is below 10.0 MMBtu/hr, therefore Boiler #2 is not subject to EPA New Source Performance Standards (NSPS) 40 CFR Part 60, Subpart Dc (Standards of Performance for Small Industrial, Commercial and Institutional Steam Generators).

Previous BACT analysis, which now represents BPT, for Boiler #2 includes the following:

- a. PM emission rates of 0.3 lb/MMBtu are based upon MEDEP Chapter 103.
- b. SO₂, CO and VOC emission rates calculated from AP-42 emission data dated 7/01.
- c. NO_X emission rates calculated from AP-42 emission data dated 7/01 for the combustion of bark and wet wood for Boiler #2.
- d. Visible emissions from Boilers #2 shall not exceed 30% opacity on a six-minute block average basis, except for no more than 2 six-minute averages in any three-hour period.

The calculations for the boiler's firing rate and emission limits were based on a heat content of 4500 Btu/lb for the bark/wood fuel (approximately 50% moisture).

As discussed in the <u>Boiler #4</u> section of this "Finding-of-Fact", Boiler #2 can be operated at any capacity up to 100% when operating in conjunction with Boiler #4 alone or operated in conjunction with Boilers #1 and #4.

3. Boiler #3

Boiler #3 is rated at 25.1 MMBtu/hr and was manufactured in 1986. The boiler fires #2 fuel oil with a sulfur content not to exceed 0.35% by weight. Because the boiler was manufactured before June 9, 1989, Boiler #3 is not subject to EPA New Source Performance Standards (NSPS) 40 CFR Part 60, Subpart Dc. At the request of the Department, as part of the permanent status of Boiler #3, Moose River removed the rain cap on the Boiler #3 stack and extended the stack height from 40 feet to 45 feet (68% GEP) in height on October 1, 2002.

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The following represents BPT for Boiler #3:

- a. PM emissions from Boiler #3 are subject to 06-096 CMR 103. However, the PM emission limit of 0.08 lb/MMBtu is considered BPT for #2 fuel oil fired boilers. The PM_{10} emission calculations are based on the PM factor.
- b. BPT for SO₂ shall be met by the use of #2 fuel oil, with a maximum sulfur content of 0.35% by weight.
- c. SO₂, NO_X, CO, VOC emission rates calculated from AP-42 emission data dated 9/98.
- d. Visible emissions from the stack are subject to 06-096 CMR 101. Visible emissions from Boiler #3 shall not exceed 20% opacity on a six-minute block average basis, except for no more than 1 six-minute average in any three-hour period.

As discussed in the <u>Boiler #4</u> section of this "Finding-of-Fact", Boilers #3 and #4 shall not be operated in conjunction at any time, except during periods of start-up and shutdown when operational overlap is necessary.

4. Boiler #4

The new Boiler #4 has a maximum heat input capacity of 29.39 MMBtu/hr firing wood. Moose River plans to fire a mixture of green wood and dried wood in Boiler #4 at a blend of approximately 80% green wood and 20% dry wood.

Boiler #4 makes use of two in-series multi-clone ash collectors and a fly ash re-injection system. Further emissions control will be achieved through staged combustion, a live combustion chamber grate, combustion controls and O₂ trim. Use of these emissions control devices and methods as well as good combustion and operating practices shall be considered BACT for Boiler #4.

Boiler #4 has a maximum heat input capacity of greater than the 10.0 MMBtu/hr deminimus threshold and is therefore subject to EPA New Source Performance Standards (NSPS) 40 CFR Part 60, Subpart Dc, for boilers with a maximum design heat input capacity of 10 MMBtu/hr or greater and manufactured after June 9, 1989. NSPS 40 CFR Part 60, Subpart Dc contains performance standards, which include emissions standards, monitoring requirements and test methods, for applicable small industrial-commercial-institutional boilers.

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Because Boiler #4 is a wood fired boiler, it is not subject to the SO₂ emissions standard established in Subpart Dc. Also, because Boiler #4 has a maximum heat input capacity of less than 30 MMBtu/hr, it is not subject to the PM emission standard established in Subpart Dc. Subpart Dc does specify that Moose River is subject to the reporting and record keeping requirements as outlined in 40 CFR Part 60.48c and Part 60.7.

Moose River plans to use Boiler #4 as the primary source of steam for facility heating and process steam. Moose River plans to maintain Boilers #1 and #3 for periods of time when temperatures are very cold (deep winter conditions) and when Boiler #4 is down for maintenance or other similar purpose. Moose River's license amendment application included an Ambient Air Quality Analysis. This analysis is summarized in Section III of the "Findings of Fact" of this amendment. As determined from Moose River's Ambient Air Quality Analysis, in order to comply with Maine Ambient Air Quality Standards (MAAQS) and Prevention of Significant Deterioration (PSD) increments, Moose River must reduce the firing capacity of Boiler #1 to 20% capacity or less, on a 24-hour basis, when Boiler #1 and the new Boiler #4 are fired in conjunction, except during periods of start-up and shutdown when operational overlap is necessary. Boilers #3 and #4 shall not be operated in conjunction at any time, except during periods of start-up and shutdown when operational overlap is necessary.

As discussed below, Moose River included a BACT analysis with the amendment application for this license amendment which includes discussions of several control devices and methods that were determined to be neither economically or technically feasible.

BACT

In preparing the application for license amendment to include the operation of the new wood fired boiler, Moose River undertook a BACT analysis which takes into consideration several control technologies.

a. In considering control for emissions of particulate matter (PM/PM₁₀), Moose River examined the use of fabric filters, a wet scrubber, an electrostatic precipitator (ESP) and the use of multiclone dust separators with fly ash re-injection. Potential fire danger makes the use of fabric filters not feasible and although wet scrubbers and ESPs have high capture efficiencies, they are also very expensive and this makes the use of these technologies not feasible. BACT for PM/PM₁₀ emissions control for Boiler #4 is the use of multiclone dust separators with fly ash re-injection and good operating practices.

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b. In considering control for NO_x emissions, Moose River examined the use of selective catalytic reduction (SCR) and selective non-catalytic reduction (SNCR). Both SCR and SNCR utilize the injection of a nitrogen based compound (commonly ammonia) into the boiler's combustion zone. The compound causes the reduction reaction of the NO_x gases in the exhaust. In the case of SCR, a catalyst, such as platinum or titanium, is used to increase the reaction speed. With these control systems, there is an issue of ammonia emissions. Both of these technologies are expensive and require a great deal of energy to operate. For these reasons, both the use of SCR or SNCR is technically and economically not feasible.

Moose River also examined the use of an Ecotube system for NO_x The Ecotube system makes use of two or more emission control. retractable lance like perforated tubes that are inserted into the upper combustion zone of the boiler. High velocity air and in some instances a reagent (ammonia or urea) are introduced through the tube. The air will cool the upper combustion areas resulting in a decrease in the formation of thermal NO_x emissions and the reagent will cause a reduction reaction further reducing NO_x emissions. This technology has not been applied to small boilers of the size proposed for Boiler #4, in part due to the physically limited space available in a boiler of this size. This type of system has had applications in much larger utility-grade units with very large furnace volumes. In addition, use of Ecotube technology was not determined to be BACT for any small wood-fired boilers in EPA's For these reason, the RACT/BACT/LAER clearinghouse (RBLC). Ecotube technology is not feasible for this application.

Moose River also examined the use of flue gas recirculation (FGR) as a method of NO_x emissions control. FGR removes a small portion of the combustion exhaust and re-circulates this exhaust portion back to the burner section air intake of the boiler. This technique will reduce the amount of oxygen (O_2) in the combustion zone which reduces the amount of O_2 available for combustion. This has the effect of reducing combustion zone temperatures which decreases the formation of thermal NO_x emissions. This is not a technology that is typically applied to boilers of the size of the new Boiler #4 and it is uncertain that this technology would perform well or be technically feasible to install.

BACT for NO_x emissions from Boiler #4 is the use of good combustion control practices to minimize NO_x emissions.

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- c. In considering control for CO and VOC emissions, Moose River searched the RBLC to see what BACT determinations had been made for other similarly sized boilers. In the cases that BACT determinations were made for CO or VOC emissions from similar boilers, BACT was determined to be the use of good operating practices.
- d. The RBLC had no determinations for the control of SO₂ emissions from boilers the size of the new Boiler #4 at Moose River. The Department has determined that BACT for the control of SO₂ emission is the firing of wood fuel.

A summary of the BACT analysis for Boiler #4 (29.39 MMBtu/hr) is as follows:

- a. PM emissions from Boiler #4 are subject to 06-096 CMR 103. However, the PM emission limit of 0.3 lb/MMBtu when firing wood shall be considered BACT. The PM emission factor is based on manufacture guarantee. The PM₁₀ emission calculations are based on the PM factor.
- b. The NO_x emission calculations are based on similarly sized units and manufacturer's information. A limit of 0.34 lb/MMBtu of NO_x emissions shall be considered BACT.
- c. SO₂, CO and VOC emission limits are based upon AP-42 data dated 9/03.
- d. Visible emissions from the stack are subject to 06-096 CMR 101. Visible emissions from Stack #4 shall not exceed 30% opacity on a six-minute block average except, for no more than 2 six-minute block averages in a 3-hour period.

C. Process Emissions Equipment Description

1. Wood Drying Kilns

Moose River uses three kilns, designated Kilns #1, #2 and #3 to dry the spruce and fir lumber produced at the facility. Emissions from the wood drying kilns include VOCs. Based on data from the University of Maine, spruce and fir emit approximately 1.283-lb VOC/1000 board feet. Moose River has an annual VOC emission limit based on a 98 million boardfeet per year kiln throughput and an emission factor for the drying of spruce and fir of 1.283 pounds of VOC per 1,000 boardfeet of wood dried. This establishes an annual limit for the facility of 62.9 tons of VOC per year from kiln drying operations based on a twelve-month rolling total.

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To demonstrate compliance with the VOC emission limits, Moose River shall maintain a record of kiln production and VOC emissions. The record shall include VOC emissions, the quantity of wood dried and the species of wood dried. The record shall be maintained on a monthly as well as a twelve-month rolling total basis. When calculating VOC emissions, the following emissions factor shall be used.

Species	Emission Factor (lb/1000BF)
Spruce/fir	1.283

Prior to drying any species of wood other than spruce and fir in the kilns, Moose River shall contact the Department for approval of an alternative emission factor appropriate for the species that the facility intends to dry.

2. Wood Chip and Wood Sawdust Handling

Moose River utilizes a conveyor belt system to transfer wood chips from the sawmill to the chip loading storage building where the chips are loaded by bucket loader onto trucks to be transferred to paper mills. Bark removed from the logs prior to processing is transferred by a drag chain conveyor system from the sawmill to a concrete bark storage pad where it is transferred by bucket loader to trucks for transfer to various markets.

Moose River utilizes blower systems to transfer sawdust from the sawmill to the sawdust storage shed and to transfer planer shavings and planer sawdust to the Boiler #1 fuel silo. A process cyclone, designated Cyclone #1, for handling particulate matter (PM) and particulate matter with a diameter of ten (10) microns or less (PM_{10}) that is generated by the wood processing equipment, is located at the top of the Boiler #1 fuel storage silo.

In accordance with 06-096 CMR 101, Section 2(B)(3)(d) of the Department's regulations, general process emissions from the wood chip and wood dust handling systems, which include the wood chip and sawdust transfer systems (blower systems and conveyor systems), the dust cyclone, and chip and dust collection buildings and silo, shall not exceed an opacity of 20% on a 6-minute block average basis, except for no more than one 6-minute block average in a 1-hour period.

Moose River shall establish a system of maintenance, inspection and repair for the wood chip and wood dust handling systems, which shall allow for a monthly inspection of the system. Moose River shall document compliance by means of a maintenance, inspection and repair log.

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3. <u>Degreaser Unit</u>

Moose River makes use of a Safety-Kleen 30-gallon parts degreaser unit. The degreaser unit was installed in 2002 and uses Safety-Kleen 105 solvent as the cleaning medium. Safety-Kleen 105 solvent is 100% VOCs and Moose River uses less than 50 gallons of solvent per year, therefore, with a density of 6.7 pounds per gallon, VOC emissions as a result of the parts degreaser are expected to be less than 0.2 tons per year.

Moose River shall maintain a record of Safety-Kleen 105 solvent use that shall include the amount of solvent added to the degreaser unit and the dates that the solvent was added. The record shall be maintained on a monthly and a twelve-month rolling total basis. For purposes of record keeping, the amount of solvent used shall be considered as the difference between the amount of solvent added and the amount of solvent removed.

In accordance with Solvent Degreasers, 06-096 CMR 130 (last emended June 28, 2004), Section 3A, Moose River shall equip the degreasing unit with the following:

- 1. Equip the degreaser with a cover that can be operated with one hand if vapor pressure >15 mmHG at 100°F.
- 2. Equip the cleaner with an internal drainage basket so that parts are under the cover while draining if the solvent true vapor pressure > 32 mmHG at 100°F, except that the drainage basket may be external where an internal basket cannot fit into the degreaser.
- 3. Affix a permanent conspicuous label summarizing the following operating standards:
 - Close cover when not in use,
 - Drain cleaned parts for at least 15 seconds or until dripping ceases,
 - If applicable, solvent spray must be a solid fluid stream and shall not exceed a pressure of 10 pounds per square inch gauge (psig),
 - Do not degrease porous or absorbent materials,
 - Do not operate degreaser if draft is greater than 131.2 feet per minute (ft/min) as measured between 3.28 and 6.56 feet upwind and at the same elevation as the tank lip), and
 - Do not operate degreaser upon occurrence of any visible leak until such leak is repaired.

In accordance with 06-096 CMR 130, Section 3A, Moose River shall follow operational standards when making use of the parts degreaser.

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In accordance with Chapter 130, Section 3A of the Department regulations, Moose River shall implement one of the following control measures if the solvent true vapor pressure > 32 mmHG at 100°F or if the solvent is heated to above 120°F:

- i. Freeboard height that gives a freeboard ratio (freeboard height divided by the smaller of the interior length, width or diameter) of greater than or equal to 0.7;
- ii. Water cover at least 1 inch in depth (solvent shall be insoluble in and heavier than water); or
- iii. Another system of equivalent control, such as refrigerated chiller or a carbon adsorber, approved by the Department and the Environmental Protection Agency (EPA).

4. <u>Liquid Organic Storage Tank</u>

Moose River makes use of a 12,000-gallon steel tank to store #2 fuel oil for Boiler #3. The tank was manufactured and installed in 1999 and currently has an approximate annual throughput of between 300,000 and 400,000-gallons of #2 fuel oil per year. The tank has a capacity of approximately 21 cubic meters (m³) and is therefore not subject to EPA's New Source Performance Standards (NSPS), Subpart Kb (Standards of Performance for Volatile Organic Liquid Storage Vessels).

5. Ink Labeling Process

Moose River utilizes a labeling process in which ink rolls are used to coat labeling spools for imprinting the board ends for inventory purposes. Moose River utilizes approximately 52 ink rolls per year with each roll containing approximately 10oz. of ink. The ink labeling process uses no greater than 50-gallons of coating, therefore, it is considered an insignificant activity and emissions from the process are not considered in determining facility emissions limits.

D. Annual Emission Restrictions

Moose River Lumber Company shall be restricted to the following annual emissions, based on a 12-month rolling total:

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Total Licensed Annual Emission for the Facility

(used to calculate the annual license fee)

Pollutant	Emissions in tons/year							
-	Boiler #1	Boiler #2	Boiler #3	Boiler #4	<u>Kilns</u>	<u>Total</u>		
PM	20.10	5.91	8.80	38.62	-	73.43		
PM_{10}	20.10	5.91	8.80	38.62	-	73.43		
SO_2	1.68	0.49	39.03	3.22	-	44.41		
NO _x	32.84	4.34	15.71	43.77	-	96.65		
CO	40.21	11.83	3.93	77.24	-	133.20		
VOC	2.55	0.75	0.27	2.19	62.87	68.62		

^{*} Facility wide VOC emissions total does not include VOC emissions from the parts degreaser.

III AMBIENT AIR QUALITY ANALYSIS

A. Overview

A screening modeling analysis was performed to show that emissions from Moose River, in conjunction with other sources, will not cause or contribute to violations of Maine Ambient Air Quality Standards (MAAQS) for SO_2 , PM_{10} , NO_2 or CO or to Class II increments for SO_2 , PM_{10} or NO_2 .

Based upon the distance from the source to the nearest Class I area (175 kilometers) and the magnitude of emissions increase, the affected Federal Land Managers (FLMs) and MEDEP-BAQ have determined that an assessment of Class I Air Quality Related Values (AQRVs) is not required.

B. Model Inputs

The SCREEN3 model was used to address standards in all areas. In addition, the complex terrain mode of the SCREEN3 model (SCREEN3-VALLEY) was used to evaluate impacts in intermediate and complex terrain, i.e., areas where terrain elevations exceed the proposed stack-top elevations.

All modeling was performed in accordance with all applicable requirements of the Maine Department of Environmental Protection, Bureau of Air Quality (MEDEP-BAQ) and the United States Environmental Protection Agency (USEPA).

The meteorological database used in the SCREEN3 screening analysis consisted of USEPA's standard fifty-four hours of meteorological data that represent a variety of wind speed and stability class combinations. A wind speed of 2.5 meters per second and Class "F" stability were assumed in the SCREEN3-VALLEY modeling analysis.

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Point-source parameters, used in the modeling for Moose River are listed in Table III-1. The modeling analyses accounted for the potential of building wake effects on emissions from all modeled stacks that are below their respective formula GEP stack heights.

TABLE III-1: Point Source Stack Parameters

	Stack Base Elevation	Stack Height	GEP Stack Height	Stack Diameter	UTM Easting NAD83	UTM Northing NAD83
Facility/Stack	(m)	(m)	(m)	(m)	(km)	(km)
	CURR	ENT/PRO	POSED			
Moose River						
Boiler #1 (Wood-fired Kiln Boiler)	362.80	21.34	29.15	0.60	402.569	5055.455
Boiler #2 (Wood-fired Boiler)	361.19	27.43	23.11	0.60	420.697	5055.409
Boiler #3 (Oil-fired Boiler)	361.19	13.72	20.19	0.62	402.492	5055.389
Boiler #4 (New Boiler)	362.80	21.95	29.15	0.75	402.600	5055.479
	198	37 BASEL	INE			
Moose River						
Moose River conservatively assumed	no baseline cre	edit to be tak	en for sourc	es existing in tl	he 1987 basel	ine year.
1977 BASELINE						
Moose River						
No sources existed in the 1977 baseli	ne year; no bas	eline credit t	o be taken.			

Emission parameters for Moose River for MAAQS and increment modeling are listed in Table III-2. The emission parameters for Moose River are based on the maximum license allowed (worst-case) operating configuration. For the purposes of determining PM_{10} and NO_2 impacts, all PM and NO_x emissions were conservatively represented by PM_{10} and NO_2 , respectively.

TABLE III-2: Stack Emission Parameters

Facility/Stack	Averaging Periods	SO ₂ (g/s)	PM ₁₀ (g/s)	NO ₂ (g/s)	CO (g/s)	Stack Temp (K)	Stack Velocity (m/s)
	MAXIMUI	M LICE	NSE ALI	LOWED			
Moose River							
Boiler #1	All	0.05	0.58	0.95	1.16	491.48	10.09
Boiler #2	All	0.01	0.17	0.12	0.34	491.48	7.77
Boiler #3	All	1.12	0.25	0.45	0.11	491.48	15.18
Boiler #4	All	0.09	1.11	1.26	2.22	533.15	17.19
	B	ASELIN	E - 1987				
Moose River							
Moose River conservatively	assumed no baselin	e credit to	be taken for	sources ex	isting in th	e 1987 base	eline year.
	\mathbf{B}_{L}	ASELIN	E - 1977				
Moose River							
No sources existed in the 197	77 baseline year; no	baseline c	redit to be t	aken.			

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C. Single Source Modeling Impacts

Screening modeling was performed for a total of 10 operating scenarios that represented a range of maximum, typical and minimum operations. Moose River is proposing to operate the boilers in the following scenarios:

- Scenario 1: Boilers #2 and #4 operating simultaneously at any loads up to 100%, Boiler #1 simultaneously operating at a load not to exceed 20% capacity, Boiler #3 not operating;
- Scenario 2: Boiler #1 and Boiler #2 operating simultaneously at any loads up to 100% capacity; Boilers #3 and #4 not operating;
- Scenario 3: Boiler #3 operating at any load up to 100% capacity, Boilers #1, #2 and #4 not operating.

The model results for Moose River alone, in both simple and complex terrain, are shown in Tables III-3 and III-4, respectively. Maximum predicted impacts that exceed their respective significance level are indicated in boldface type. No further modeling was required for pollutant/terrain combinations that did not exceed their respective significance levels.

TABLE III-3: Maximum SCREEN3 Simple Terrain Impacts from Moose River Alone

Pollutant	Averaging Period	Max Impact (μg/m³)	Scenario	Class II Significance Level (µg/m³)
SO_2	3-hour	97.08	3	25
	24-hour	43.15	3	5
	Annual	8.63	3	1
PM_{10}	24-hour	29.89	1	5
	Annual	5.98	1	1
NO_2	Annual	8.51	2	1
CO	1-hour	149.41	1	2000
	8-hour	104.59	1	500

TABLE III-4: Maximum SCREEN3 - VALLEY Complex Terrain Impacts from Moose River Alone

Pollutant	Averaging Period	Max Impact (μg/m³)	Scenario	Class II Significance Level (µg/m³)
SO_2	3-hour	124.85	3	25
	24-hour	34.68	3	5
	Annual	11.10	3	1
PM_{10}	24-hour	26.28	1	5
	Annual	8.41	1	1
NO_2	Annual	10.44	1	1
CO	1-hour	210.16	1	2000
	8-hour	147.12	1	500

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D. Combined Source Modeling Impacts

For predicted modeled impacts from Moose River alone that exceeded significance levels, as indicated in boldface type in Tables III-3 and III-4, other sources not explicitly included in the modeling analysis must be accounted for by using representative background concentrations for the area.

Background concentrations, listed in Table III-5, are derived from representative rural background data for use in the Northern Maine region.

TABLE III-5: Background Concentrations

Pollutant	Averaging Period	Background Concentration (µg/m³)	Date
SO_2	3-hour	24	2003 ¹
	24-hour	13	
	Annual	5	
PM_{10}	24-hour	32	$1999 - 2001^1$
	Annual	10	
NO_2	Annual	11	1995 ²

Notes:

MEDEP examined other nearby sources to determine if any impacts would be significant in or near Moose River's significant impact area. Due to the Moose River's location, extent of the significant impact area and nearby source's emissions, MEDEP has determined that no other sources would be considered for combined source modeling.

For pollutant averaging periods that exceeded significance levels, the maximum modeled impacts from the model predicting the highest concentrations were added with conservative rural background concentrations to demonstrate compliance with MAAQS, as shown in Table III-6. Because all pollutant/averaging period impacts using this method meet MAAQS, no further MAAQS modeling analyses need to be performed.

¹ Robinson Site, Easton ² TLSP Site, Cape Elizabeth

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TABLE III-6: Maximum Combined Sources Impacts

Pollutant	Averaging Period	Max Impact (μg/m³)	Back- Ground (μg/m³)	Max Total Impact (μg/m³)	MAAQS (μg/m³)
SO_2	3-hour	124.85	24.00	148.85	1150
	24-hour	43.15	13.00	56.15	230
	Annual	11.10	5.00	16.10	57
PM_{10}	24-hour	29.89	32.00	61.89	150
	Annual	8.41	10.00	18.41	40
NO_2	Annual	10.44	11.00	21.44	100

E. Increment

Moose River's maximum Class II increment impacts were predicted using SCREEN3 modeling in both simple terrain and complex terrain. For addressing increment impacts in intermediate terrain (i.e., terrain above stack-top and below plume centerline), the higher of the two predicted increment impacts were chosen, per EPA Model Clearinghouse guidance Memo #77. For existing emissions sources, the maximum license allowed emissions limits were conservatively used in the increment analysis.

Results of the Class II increment analysis are shown in Table III-7. All modeled maximum increment impacts were below their respective increment standards. Because all predicted increment impacts meet increment standards, no further Class II SO₂, PM₁₀ and NO₂ increment modeling for Moose River needed to be performed.

TABLE III-7: Maximum Class II Increment Consumption

Pollutant	Averaging Period	Max Impact (μg/m³)	Scenario	Class II Increment (µg/m³)
SO_2	3-hour	124.85	3	512
	24-hour	43.15	3	91
	Annual	11.10	3	20
PM_{10}	24-hour	29.89	1	30
	Annual	8.41	1	17
NO_2	Annual	10.44	1	25

Federal regulations and 06-096CMR140 require that any source undergoing a major modification provide additional analyses of impacts that would occur as a direct result of the general, commercial, residential, industrial and mobile-source growth associated with the construction and operation of that source.

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GENERAL GROWTH: Very minimal increases in local emissions due to construction related activities are expected to occur, as the proposed modification will involve relatively minor and short-lived general construction. Increases in potential emissions of NO_x due to increased traffic to the facility will be minimal, as there will be an insignificant increase in truck traffic in and out of the area. Fugitive PM emissions (if any) will be minimized by the use of "Best Management Practices".

RESIDENTIAL, COMMERCIAL AND INDUSTRIAL GROWTH: Population growth in the impact area of a proposed source can be used as a surrogate factor for the growth in emissions from combustion sources. Since the population in Somerset County has increased approximately 5% since the minor source baseline date was established and the modification is not expected to create any new jobs, no new significant residential, commercial and industrial growth will likely follow from the modification associated with this source.

MOBILE SOURCE AND AREA SOURCE GROWTH: Since area and mobile sources are considered minor sources of NO₂, their contribution to increment has to be evaluated. Technical guidance from USEPA points out that screening procedures can be used to determine whether additional detailed analyses of minor source emissions are required. Compiling a minor source inventory may not be required if it can be shown that little or no growth has taken place in the impact area of the proposed source since the baseline date (February 8, 1988) was established. Emissions during the calendar year 1987 are used to determine baseline emissions. As stated previously, the population in Somerset County has increased approximately 5% since the minor source baseline date was established; therefore, no further assessment of additional area source growth of NO₂ increment is needed.

Any emissions associated with the minimal increases in vehicle miles traveled have been likely more than offset by decreases in NO_x emissions in terms of reduced average grams-per-vehicle-mile emission rates since the minor source baseline date was established. Therefore, no increase in actual NO_x emissions from mobile sources is expected. No further detailed analyses of mobile NO_2 emissions are needed.

F. Class I Impacts

Based upon the distance from the source to the nearest Class I area (175 kilometers) and the magnitude of emissions increase, the affected Federal Land Managers (FLMs) and MEDEP-BAQ have determined that an assessment of Class I Air Quality Related Values (AQRVs) is not required.

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G. Summary

In summary, it has been demonstrated that Moose River in its proposed configuration will not cause or contribute to a violation of any SO₂, PM₁₀, NO₂ or CO averaging period MAAQS or any SO₂, PM₁₀ or NO₂ averaging period Class II increment standards.

ORDER

Based on the above Findings and subject to conditions listed below, the Department concludes that emissions from this sources:

- will receive Best Practical Treatment;
- will not violate applicable emissions standards
- will not violate applicable ambient air quality standards in conjunction with emissions from other sources.

The Department hereby grants this NSR Air Emission License A-779-77-1-A, subject to the following conditions:

<u>Severability</u>: the invalidity or unenforceability of any provision, or part thereof, of this License shall not affect the remainder of the provision or any other provisions. This License shall be construed and enforced in all respects as if such invalid or unenforceable provision or part thereof had been omitted.

STANDARD CONDITIONS

- (1) Employees and authorized representatives of the Department shall be allowed access to the licensee's premises during business hours, or any time during which any emissions units are in operation, and at such other times as the Department deems necessary for the purpose of performing tests, collecting samples, conducting inspections, or examining and copying records relating to emissions (Title 38 MRSA §347-C).
- (2) The licensee shall acquire a new or amended air emission license prior to commencing construction of a modification, unless specifically provided for in 06-096 CMR 115. [06-096 CMR 115]
- (3) Approval to construct shall become invalid if the source has not commenced construction within eighteen (18) months after receipt of such approval or if construction is discontinued for a period of eighteen (18) months or more. The Department may extend this time period upon a satisfactory showing that an extension is justified, but may condition such extension upon a review of either the control technology analysis or the ambient air quality standards analysis, or both. [06-096 CMR 115]

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- (4) The licensee shall establish and maintain a continuing program of best management practices for suppression of fugitive particulate matter during any period of construction, reconstruction, or operation which may result in fugitive dust, and shall submit a description of the program to the Department upon request. [06-096 CMR 115]
- (5) The licensee shall pay the annual air emission license fee to the Department, calculated pursuant to Title 38 M.R.S.A. §353.
- (6) The license does not convey any property rights of any sort, or any exclusive privilege. [06-096 CMR 115]
- (7) The licensee shall maintain and operate all emission units and air pollution systems required by the air emission license in a manner consistent with good air pollution control practice for minimizing emissions. [06-096 CMR 115]
- (8) The licensee shall maintain sufficient records to accurately document compliance with emission standards and license conditions and shall maintain such records for a minimum of six (6) years. The records shall be submitted to the Department upon written request. [06-096 CMR 115]
- (9) The licensee shall comply with all terms and conditions of the air emission license. The filing of an appeal by the licensee, the notification of planned changes or anticipated noncompliance by the licensee, or the filing of an application by the licensee for a renewal of a license or amendment shall not stay any condition of the license. [06-096 CMR 115]
- (10) The licensee may not use as a defense in an enforcement action that the disruption, cessation, or reduction of licensed operations would have been necessary in order to maintain compliance with the conditions of the air emission license. [06-096 CMR 115]
- (11) In accordance with the Department's air emission compliance test protocol and 40 CFR Part 60 or other method approved or required by the Department, the licensee shall:
 - (i) perform stack testing to demonstrate compliance with the applicable emission standards under circumstances representative of the facility's normal process and operating conditions:

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- a. within sixty (60) calendar days of receipt of a notification to test from the Department or EPA, if visible emissions, equipment operating parameters, staff inspection, air monitoring or other cause indicate to the Department that equipment may be operating out of compliance with emission standards or license conditions; or
- b. pursuant to any other requirement of this license to perform stack testing.
- (ii) install or make provisions to install test ports that meet the criteria of 40 CFR Part 60, Appendix A, and test platforms, if necessary, and other accommodations necessary to allow emission testing; and
- (iii)submit a written report to the Department within thirty (30) days from date of test completion.

 [06-096 CMR 115]
- (12) If the results of a stack test performed under circumstances representative of the facility's normal process and operating conditions indicate emissions in excess of the applicable standards, then:
 - (i) within thirty (30) days following receipt of such test results, the licensee shall re-test the non-complying emission source under circumstances representative of the facility's normal process and operating conditions and in accordance with the Department's air emission compliance test protocol and 40 CFR Part 60 or other method approved or required by the Department; and
 - (ii) the days of violation shall be presumed to include the date of stack test and each and every day of operation thereafter until compliance is demonstrated under normal and representative process and operating conditions, except to the extent that the facility can prove to the satisfaction of the Department that there were intervening days during which no violation occurred or that the violation was not continuing in nature; and
 - (iii)the licensee may, upon the approval of the Department following the successful demonstration of compliance at alternative load conditions, operate under such alternative load conditions on an interim basis prior to a demonstration of compliance under normal and representative process and operating conditions. [06-096 CMR 115]
- (13) Notwithstanding any other provisions in the State Implementation Plan approved by the EPA or Section 114(a) of the CAA, any credible evidence may be used for the purpose of establishing whether a person has violated or is in violation of any statute, regulation, or Part 70 license requirement. [06-096 CMR 115]

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- (14) The licensee shall maintain records of malfunctions, failures, downtime, and any other similar change in operation of air pollution control systems or the emissions unit itself that would affect emission and that is not consistent with the terms and conditions of the air emission license. The licensee shall notify the Department within two (2) days or the next state working day, whichever is later, of such occasions where such changes result in an increase of emissions. The licensee shall report all excess emissions in the units of the applicable emission limitation. [06-096 CMR 115]
- (15) Upon written request from the Department, the licensee shall establish and maintain such records, make such reports, install, use and maintain such monitoring equipment, sample such emissions (in accordance with such methods, at such locations, at such intervals, and in such a manner as the Department shall prescribe), and provide other information as the Department may reasonably require to determine the licensee's compliance status. [06-096 CMR 115]

SPECIFIC CONDITIONS

- (16) Boiler #1
 - A. Moose River is licensed to operate Boiler #1 (15.3 MMBtu/hr) which is licensed to fire kiln-dried planer mill shavings. [06-096 CMR 115, BPT]
 - B. Emissions from Boiler #1 shall not exceed the following limits:

Boiler #1

Equipment		PM	PM_{10}	SO ₂	NO_x	CO	VOC
	lb/MMBtu	0.3	-	-	-	_	-
Boiler #1	lb/hr	4.59	4.59	0.38	7.50	9.18	0.58

[06-096 CMR 115, BPT]

- C. When operating Boilers #4 and #1 in conjunction, Moose River must reduce the heat input firing capacity of Boiler #1 to 20% capacity or less, on a 24-hour basis, except during periods of start-up and shutdown when operational overlap is necessary. [06-096 CMR 115, BPT]
- D. Moose River shall operate Boiler #1 such that the visible emissions from the stack do not exceed 30% opacity on a six-minute block average basis, except for no more than 2 six-minute block averages in a 3-hour period. [06-096 CMR 101]

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(17) <u>Boiler #2</u>

- A. Moose River is licensed to operate Boiler #2 (4.5 MMBtu/hr) which is licensed to fire hog fuel (wood waste and bark). [06-096 CMR 115, BPT]
- B. Emissions from the boiler shall not exceed the following limits:

Boiler #2

Equipment		PM	PM ₁₀	SO ₂	NO _x	CO	VOC
	lb/MMBtu	0.3	-	-	-	-	-
Boiler #2	lb/hr	1.35	1.35	0.11	0.99	2.70	0.17

[06-096 CMR 115, BPT]

C. Moose River shall operate Boiler #2 such that the visible emissions from the stack do not exceed 30% opacity on a six-minute block average basis, except for no more than 2 six-minute block averages in a 3-hour period. [06-096 CMR 101]

(18) Boiler #3

- A. Moose River is licensed to operate Boiler #3 (25.1 MMBtu/hr) which is licensed to fire #2 fuel oil with a sulfur content not to exceed 0.35% by weight. [MEDEP Chapter 115, BPT]
- B. Moose River shall maintain fuel purchase records which shall include purchase receipts or fuel supplier certification that specify the amount of fuel purchased, the sulfur content of the fuel and the fuel delivery date. Fuel records shall be maintained on a monthly as well as a 12-month rolling basis. [MEDEP Chapter 115, BPT]
- C. Emissions from the boiler shall not exceed the following limits:

Equipment		PM	PM_{10}	SO_2	NO_x	CO	VOC
	lb/MMBtu	0.08	-	-	-	-	-
Boiler #3	lb/hr	2.01	2.01	8.91	3.59	0.90	0.06

[06-096 CMR 115, BPT]

D. Moose River shall not operate Boilers #3 and #4 in conjunction at any time except during periods of start-up and shutdown when operational overlap is necessary. [06-096 CMR 115, BACT]

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E. Moose River shall operate the boiler such that the visible emissions from the stack do not exceed 20% opacity on a six-minute block average basis, except for no more than 1 six-minute block average in a 3-hour period.

[MEDEP Chapter 101]

(19) Boiler #4

- A. Boiler #4 shall not exceed a heat input capacity of 29.39 MMBtu/hr. [06-096 CMR 115, BACT]
- B. Boiler #4 shall not exceed the following emissions:

Equipment		PM	PM ₁₀	SO_2	NO _x	CO	VOC
	lb/MMBtu	0.3	-	-	-	-	-
Boiler #4	lb/hr	8.82	8.82	0.73	9.99	17.63	0.50

[06-096 CMR 115, BACT]

- C. Visible emissions from the Boiler #4 stack shall not exceed 30% opacity on a 6-minute block average, except for no more than 2 six-minute block averages in any three-hour period. [06-096 CMR 101]
- D. When operating Boilers #4 and #1 in conjunction, Moose River must reduce the heat input firing capacity of Boiler #1 to 20% capacity or less, on a 24-hour basis, except during periods of start-up and shutdown when operational overlap is necessary. [06-096 CMR 115, BACT]
- E. Moose River shall not operate Boilers #3 and #4 in conjunction at any time, except during periods of start-up and shutdown when operational overlap is necessary. [06-096 CMR 115, BACT]
- F. As required by EPA NSPS 40 CFR Part 60, Subpart Dc does specify that Moose River is subject to the reporting and record keeping requirements as outlined in 40 CFR Part 60.48c and Part 60.7.

(20) <u>Drying Kilns</u>

A. Moose River shall be limited to an annual VOC emissions limit of 62.9 tons of VOC per year (tons/yr) from the drying of wood in the facility's wood drying kilns based on a twelve-month rolling total.

[MEDEP Chapter 115, BPT]

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- B. Moose River Lumber Company, Inc. shall maintain records indicating the quantity of wood dried in BF and VOC emissions. VOC emissions shall be calculated using an emission factor for spruce and fir of 1.283 pounds of VOC per 1,000 BF. The kiln record shall be maintained on a monthly and a 12-month rolling total basis. [06-096 CMR 115, BACT]
- C. Prior to drying any species of wood other than spruce and fir in the kilns, Moose River shall contact the Department for approval of an alternative emission factor appropriate for the species that the facility intends to dry. [06-096 CMR 115, BACT]

(21) Wood Chip and Wood Dust Handling System

- A. Visible emissions from the wood chip and wood dust handling systems, including the wood chip and sawdust transfer systems (blower systems and conveyor systems), the dust cyclone, and chip and dust collection buildings and silo, shall not exceed an opacity of 20% on a 6-minute block average basis, except for no more than one 6-minute block average in a 1-hour period. [06-096 CMR 101]
- B. Moose River shall establish a system of maintenance, inspection and repair for the wood chip and wood dust handling system, which shall allow for a monthly inspection of the system. [06-096 CMR 115, BACT]
- C. Moose River shall maintain a maintenance, inspection and repair log of the wood chip and wood dust handling system. Moose River shall inspect operations of the wood chip and wood dust handling system, once per month and record findings in the maintenance, inspection and repair log. [06-096 CMR 115, BACT]

(22) Parts Degreaser

- A. In accordance with 06-096 CMR 130, Section 3A, of the Department regulations, Moose River shall follow equipment and operational standards when making use of the parts degreasers. [MEDEP Chapter 130]
- B. In accordance with 06-096 CMR 130, section 3A, of the Department regulations, Moose River shall equip each degreasing unit with the following:
 - 1. Equip each degreaser with a cover that can be operated with one hand if vapor pressure >15 mmHG at 100°F, if the solvent is agitate or if the solvent is heated. [06-096 CMR 130]

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- 2. Equip the cleaner with an internal drainage basket so that parts are under the cover while draining if the solvent true vapor pressure > 32 mmHG at 100°F, except that the drainage basket may be external where an internal basket cannot fit into the degreaser. [06-096 CMR 130]
- 3. Affix a permanent conspicuous label summarizing the following operating standards:
 - Close cover when not in use,
 - Drain cleaned parts for at least 15 seconds or until dripping ceases,
 - If applicable, solvent spray must be a solid fluid steam and shall not exceed a pressure of 10 pounds per square inch gauge (psig),
 - Do not degrease porous or absorbent materials,
 - Do not operate degreaser if draft is greater than 131.2 feet per minute (ft/min) as measured between 3.28 and 6.56 feet upwind and at the same elevation as the tank lip), and
 - Do not operate degreaser upon occurrence of any visible leak until such leak is repaired [MEDEP Chapter 130]
- C. In accordance with 06-096 CMR 130, section 3A, of the Department regulations, Moose River shall implement one of the following control measures if the solvent true vapor pressure > 32 mmHG at 100°F or if the solvent is heated to above 120°F:
 - i. Freeboard height that gives a freeboard ratio (freeboard height divided by the smaller of the interior length, width or diameter) of greater than or equal to 0.7;
 - ii. Water cover at least 1 inch in depth (solvent shall be insoluble in and heavier than water); or
 - iii. Another system of equivalent control, such as refrigerated chiller or a carbon adsorber, approved by the Department and the Environmental Protection Agency (EPA).

 [06-096 CMR 130]
- D. Moose River shall maintain a record of solvent use for the parts degreasers. The record shall include solvent added and removed, the dates when solvent is added and removed, the quantity of solvent added and removed and the VOC content of the solvent. If, in the future, Moose River switches to a solvent that contains 1% VOC or less for use in the degreasing unit, to satisfy record keeping requirements, Moose River need only keep a copy of the MSDS sheet that demonstrates the VOC content of the solvent on file at the Moose River facility. [06-096 CMR 115, BPT]

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(23) This NSR Air Emission License will supersede Air Emission License A-779-71-A-N and its amendments upon the signature date of this NSR Air Emission License.

DONE AND DATED IN AUGUSTA, MAINE THIS 30th

DAY OF September 2008.

DEPARTMENT OF ENVIRONMENTAL PROTECTION

BY: DAVID P. LITTEKI, COMMISSIONER

PLEASE NOTE ATTACHED SHEET FOR GUIDANCE ON APPEAL PROCEDURES

Date of initial receipt of application: March 12, 2008
Date of application acceptance: April 14, 2008

Date filed with the Board of Environmental Protection:

This Order prepared by, Peter G. Carleton, Bureau of Air Quality

